

## APPENDIX G

### GUIDANCE ON DEVELOPING FACILITY POLLUTION PREVENTION PROGRAMS AND IMPLEMENTING POLLUTION PREVENTION PROGRAM ELEMENTS

**1. Introduction.** This appendix is for guidance only. Its purpose is to provide assistance in the development of shore facility Pollution Prevention (P2) Programs in conjunction with Federal, State, and local laws and requirements, to outline the principal P2 Program elements, and to offer guidance on implementing those elements.

#### NOTE:

Applicable State and local codes, standards, and regulations may be and often are more stringent than Federal requirements, especially in regard to environmental programs and hazardous waste (HW) issues.

**2. P2 Program Development.** The P2 Program outlined herein is essentially a revision to, and expansion of, the Hazardous Material Control and Management (HMC&M) Program previously outlined in guidance enclosed with OPNAVINST 4110.2 (NOTAL). That guidance is herein revised to reflect additional and updated P2 requirements, planning, and nomenclature changes, as well as incorporation of Emergency Planning and Community Right-To-Know Act (EPCRA). All Navy shore facilities should already have well-established HMC&M Programs developed per OPNAVINST 4110.2 (NOTAL). Some shore facilities may also have EPCRA Programs or facility P2 Plans. A facility P2 Program which unifies HMC&M, EPCRA, and P2 planning requirements will provide a single vehicle through which all facility hazardous material acquisition, use, substitution, reduction, accounting, disposition, and emergency planning can be assessed and controlled.

**3. P2 Program Elements.** The guidance contained herein is based upon the policies and requirements of Chapter 3 and 4 and other Department of Defense (DoD) and Navy instructions that relate to P2, hazardous material (HM) and HW management. This appendix incorporates aspects of existing programs together into a complete P2 effort. Included with the development and implementation of the facility P2 Plan, the P2 Program should incorporate the following elements, which are individually discussed below:

- .P2 Committee
- .HM Inventory
- .Material Safety Data Sheets (MSDSs)
- .Labeled HM and HW Containers
- .The Safe Use of HM
- .HM Acquisition Controls and Authorized User List (AUL)
- .Safe and Controlled Receiving, Distribution, Issuing, and Shipping of HM
- .Storage of HM
- .Management of HW
- .Emergency Response Planning
- .Shore Facility Oversight of P2 Activities
- .Recordkeeping and Reporting.

a. **P2 Committee.** The P2 Committee should be established to advise the commander or commanding officer on the policies and procedures to implement a facility P2 Program and to assist in the implementation of that Program. The P2 Committee should be multi-disciplinary and bring together the various organizations and groups having functional responsibilities and authority over HM acquisition, use, etc. The chairperson of the committee should

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be the commander, or designee (e.g., command staff officer). Tab A of this appendix provides a typical committee charter, committee composition, and functions.

b. **HM Inventory.** A current inventory of HM, hazardous chemicals, or chemical substances known or suspected to contain HM should be developed and maintained to control and manage material, per this instruction and OPNAVINST 5100.23D (NOTAL), and should be maintained in a central reference location. Each HM on the inventory should be identified by storage and use location(s) and should be assigned a unique identifier that relates it to a specific MSDS. Also, a list of hazardous chemicals is a requirement of the Occupational Safety and Health Act (OSHA) Hazard Communication (HAZCOM) Standard (29 CFR 1910.1200) and including the identifier information on the inventory will also help fulfill that requirement. A HM inventory which provides a MSDS identifier and which identifies material storage and use locations will also be an aid in:

(1) MSDS filing and providing a ready means of MSDS access for use by non-technical or emergency response personnel.

(2) Assuring that proper controls are in place for HM storage and use, HAZCOM training, Spill Prevention, Control and Countermeasures (SPCC) Plans, and Spill Contingency Plans (SCPs).

(3) Facilitating emergency notification of a Local Emergency Planning Committee (LEPC) per EPCRA Section 304, in the event of a release of a reportable quantity of material.

(4) Determining EPCRA Sections 302 and 311 reporting thresholds and EPCRA Section 313 releases.

(5) Completing EPCRA Sections 311

and 312 reports, including Section 312 Tier II reports.

(6) Creating and maintaining an AUL to be used to control HM acquisition and use (see paragraph 3.g).

(7) Forming the basis for eliminating or disposing of unneeded materials safely and properly.

c. **MSDSs.** The HAZCOM Standard requires that each shore facility using HM in its work operations and processes possess a manufacturer's MSDS for each HM item on hand and that it be easily accessed by workers. For material not having a MSDS, a shore facility should take the necessary action to obtain one. MSDSs are a key to identifying HM at the shore facility and for supporting the facility's MSDS focal point in the following functions:

(1) Reviewing manufacturer-supplied MSDSs to ensure that required data elements are completed and to identify materials containing hazardous ingredient(s).

(2) Participating in the DoD Hazardous Material Information System (HMIS) for locally procured HM.

(3) Ensuring proper labeling and the using of safe working quantities of HM in the workplace.

(4) Informing employees and contractors of hazards (see paragraph 3f(4)) and safeguards for those HM to which they may be potentially or occupationally exposed.

d. **Labeled HM and HW Containers.** Each container of material possessing hazardous ingredients should be properly labeled by the manufacturer and/or shipper(s) to warn personnel of the potential dangers of the material. In the

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event warning labels are inadvertently removed or damaged in shipping prior to receipt by shore facilities, commercial suppliers should be required to provide HAZCOM-compliant replacement labels. Facilities are not required to put DoD or other HM warning labels on new stocks because the manufacturer is responsible for placing HAZCOM-compliant labeling on such stock. Shore facilities are not to relabel existing stocks that conform with the HAZCOM Standard. Requirements for labeling are described below:

(1) 29 CFR 1910.1200 provides labeling requirements for workplace use of HM. This OSHA standard requires that containers of HM be labeled, tagged, or marked with the identity of the hazardous chemical(s); appropriate hazard warnings; and the name and address of the chemical manufacturer, importer, or other responsible party. In addition to OSHA labeling requirements, Federal and military marking standards (Federal Standard No. 123 (NOTAL) and Military Standard 129 (NOTAL)) require precautionary labeling to guide those who use and handle HM.

(2) The Environmental Protection Agency (EPA), Consumer Product Safety Commission (CPSC), Food and Drug Administration (FDA), and Bureau of Alcohol, Tobacco, and Firearms (BATF) also require labeling of HM and HW under their jurisdiction. When labeling requirements are met under EPA, CPSC, FDA, or BATF, specific labeling requirements under the OSHA HAZCOM Standard are not required.

(3) DOT labeling and marking requirements apply to the transportation and shipping of HM. Facilities are to use 40 CFR 172.101 to determine labeling requirements.

(4) Bulk storage tanks, piping, vats, or similar vessels should be labeled using the DoD Hazardous Chemical Warning Label, DD 2521

and DD 2522, when other means, such as placards, are not available or adequate to meet HAZCOM requirements. Repackaged containers or breakdown quantities of hazardous chemicals and unlabeled or improperly labeled HM already in the Navy inventory should be labeled using the DoD Hazardous Chemical Warning Label.

(5) The DoD label can be applied with variations. Color DoD labels may be used. The size of the DoD label may be locally varied to fit the size and shape of the container being labeled. Local reproduction of the DoD label is authorized.

#### NOTE:

National Fire Protection Association (NFPA) Labels used alone or without a HAZCOM compliant label are not adequate to meet the HAZCOM standard.

e. **The Safe Use of HM.** HM should be handled and used only under the following minimum safety conditions:

(1) The HM appears on the HM AUL for the workplace/workcenter in which it is used. This implies that procedures for and conditions of HM use have been evaluated and approved.

(2) The HM is stored and used in only the minimum quantity required to accomplish the mission.

(3) Personal protective equipment and requisite safety, emergency, and spill cleanup and containment equipment are readily available.

(4) Employees are adequately informed and understand HM hazards and necessary protective measures via HAZCOM training (i.e., training on the safe use of the material, HM warning properties, needed safeguards and personal protective equipment, proper disposal

techniques and procedures, and access to MSDSs). OPNAVINST 5100.23D (NOTAL) provides information concerning HM/HAZCOM training programs. In addition to training, the OSHA HAZCOM Standard requires that each facility prepare and keep current a HAZCOM Program Plan.

(5) Contractors are to be informed of HM that they may be exposed to and inform a designated facility person of HM to which Navy personnel may be exposed. Similarly, contractors must make MSDSs for their HM available to the supported facility. Pending a change to the Defense Federal Acquisition Regulations Supplement (DFARS), a locally developed clause to the effect that "Contractors shall inform the designated facility representative of all contractor used HM to which Navy personnel are exposed and shall provide MSDSs for those materials to the facility representative" should be developed.

(6) Local procedures are developed and implemented to ensure that employees performing non-routine tasks involving HM are trained, equipped, and kept under appropriate medical surveillance in advance of such work to the same extent as required for routine exposure situations.

**f. HM Acquisition Controls and AUL.**

Local procurement controls and audits should be established that are sufficiently stringent to ensure that only HM on the facility AUL is procured and that manufacturers are complying with labeling and warning requirements and are supplying MSDSs with their material. The baseline facility AUL can be developed directly from the facility HM inventory. At a minimum, the AUL should denote a specific MSDS identifier, storage and usage location, and local workcenter or code authorized to request the purchase and use of a HM (for each HM listed in the inventory). Facility-specific acquisition and AUL policies and procedures should address the following:

(1) Requestors of HM be required to request only authorized HM in approved, minimum quantities, whenever possible. Likewise, workcenter-specific AULs should be made available to those responsible for requesting HM.

**NOTE:**

Obtaining and reviewing a MSDS should be a prerequisite for placement of HM on the AUL.

(2) Requisition review prior to the issuance of any purchase order for HM be instituted to ensure that only authorized HM is being purchased. Also, conditions and procedures for adding or deleting HM or authorized workcenters from the AUL should be established.

(3) All purchase orders for HM should include appropriate clauses to ensure proper labeling of HM containers and delivery of an MSDS with the HM shipment.

(4) HM requisitions should clearly designate the user code, workcenter, or shop so that incoming MSDSs can be routed to the central MSDS reference files, HM user codes, and others having a need for current MSDS data.

**g. Safe and Controlled Receiving, Distribution, Issuing, and Shipping of HM.**  
Local policy should address specific functions as follows:

(1) Material inspection upon receipt to determine if it is HM and if it is on the AUL, if it is adequately labeled, and if a MSDS is supplied. If the material is HM and does not conform to established standards, specifications, and regulations, it should be placed in appropriate temporary hold until manufacturer-supplied labels, MSDSs, or acceptable substitutes are obtained.

(2) Prompt and safe storage for

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incoming HM deliveries.

(3) Obtaining and maintaining MSDSs and technical data for stocked HM.

**h. Storage of HM.** HM should be stored in minimum required quantities. MSDSs and HMIS provide useful information on warehouse storage and storage compatibility codes for HM. All locations for temporary and permanent storage for HM and HW, including bulk storage and tanks, must be approved by the commanding officer or designated representatives (the use of underground storage tanks is discouraged). Navy shore facilities shall not store or dispose of non-Navy-owned HM except in certain specific instances. Questions may be referred to the Engineering Field Divisions (EFDs) of the Naval Facilities Engineering Command (NAVFACENGCOM).

**i. Management of HW.** HW Management plans must be referenced in, or incorporated into P2 Plans. See Chapter 12 for HW management requirements.

**j. Emergency Response Planning.** Written emergency procedures or Spill Contingency Plans (SCPs) shall be referenced in, or incorporated into P2 Plans. See Chapter 10 for SCP requirements.

**k. Shore Facility Oversight of P2 Activities.** The commanding officer should designate a person(s) or organizational entity to develop a written annual review of the shore facility's P2 Program to assess its attainment of objectives, the effectiveness of its P2 Plan, and to recommend changes and improvements to the plan. The review should be provided to the P2 Committee for discussion and development of appropriate responses, including changes to the P2 Plan.

#### **l. Recordkeeping and Reporting.**

Recordkeeping and reporting is essential to P2. The following summarizes recordkeeping and reporting requirements of OPNAVINST 5100.23D (NOTAL): (It should also be noted that EPA has authorized State environmental agencies to administer HW programs; consequently, many of the following reports will be submitted to States depending upon circumstances.)

(1) Inventory of HM. Data elements identified in paragraph 3b may be supplemented with additional ones to meet shore facility needs for inventory control, occupational health surveillance, hazard communication training requirements, and EPCRA planning requirements.

(2) Training Records. Records of individuals' HAZCOM training accomplishments should be maintained at the shore facility per OPNAVINST 5100.23D (NOTAL). See the basic instruction for the additional recordkeeping requirements needed to conform with Resource Conservation and Recovery Act (RCRA) training requirements.

(3) HW Generator Recordkeeping. See Chapter 12.

(4) Approaches to Implementing the Program Elements. Commanders and commanding officers have options for organizing and implementing the P2 Program. Principal among these are:

(a) Formally establish the P2 Committee as discussed in paragraph 3a. and staff and charter that committee as recommended in Tab A of this appendix.

(b) Use available command or shore facility staff to plan, direct, manage and administer the P2 Program. Utilize standard staff direction, coordination and interaction requirements. Refine the existing responsibilities and functions of Supply, Procurement,

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Occupational Safety and Health, Medical, Industrial Hygiene, Public Works (and Facilities Engineering), etc., to include specifics with regard to P2. Assign, as needed, P2 tasks and program responsibilities to other staff and organizational elements. These include production, maintenance, personnel, supervisors, and others. A formalized command and shore facility P2 instruction which establishes actions and responsibilities should be issued.

**TAB A**

**POLLUTION PREVENTION COMMITTEE**  
**(Typical Committee Charter - For Guidance, Not Mandatory)**

**Purpose:** To provide multidisciplinary and interdepartmental advice to the commander on the implementation of the shore facility Pollution Prevention (P2) Program and to assist in the implementation of that program.

**Chairperson:** The commander or designee (e.g., the command staff officer).

**Membership:** Committee membership should be tailored to local needs and requirements and should include at least one alternate member for each designee. Personnel from tenants and other supporting organizations should be included as needed. Representatives of the following shore facility organizations or functions are appropriate for committee membership:

Environmental Engineering/Compliance

Occupational Safety and Health

Supply (Material Procurement, Receiving, and Shipping)

Operations (Production, Mission, etc.)

Public Works Center

Technical Specialist (chemist)

Production Planning/Engineering

Quality and Reliability Assurance Department

Emergency Response Personnel

**Functions:**

a. Integrate facility pollution prevention planning, Hazardous Material Control and Management (HMC&M) and Emergency Planning and Community Right-To-Know (EPCRA) programs into a coordinated P2 Program.

b. Formulate recommendations to the commander on all aspects of the facility P2 Program, including hazardous material (HM) source reduction and reuse, hazardous waste (HW) minimization and recycling; environmental concerns and impacts, and the safe storage, use, treatment, and disposal of HM.

c. Manage the facility HM authorized use list (AUL) and advise the commander on procedures to develop, review, edit, audit, and approve the AUL.

d. Prepare the facility P2 Plan in which P2 opportunities (i.e. substitute processes or materials which will reduce HM usage and/or HW generation) are identified and a plan of action and milestones (POA&M) for implementation of those opportunities are established.

e. Periodically review facility operations that involve HM to identify P2 opportunities and to reconcile actual HM present with the AUL. Report any HM on-hand/AUL discrepancies with suggestions for corrective action to the commander.

f. Recommend limitations on HM both used and stored for various operations and processes.

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g. Meet quarterly or upon the call of the chairperson, whichever is shorter, and maintain records of all meetings and actions of the P2 Committee.

h. Maintain HM and HW storage site approval authority.

i. Approve all methods and procedures for P2, HM and HW management and EPCRA data collection.

j. Establish P2 awareness training program.

k. Review internal HM and HW reviews and audits, monitor HM storage and usage and HW generation trends, make recommendations designed to improve P2 Program effectiveness, and formulate and propose annual pollution reduction goals to the Commander.

l. Make recommendations to facilitate worker access of Material Safety Data Sheets (MSDSs) and concerning local exemptions and exclusions of occupations and locations involved with HM (e.g. administrative areas, offices).